

A silhouette of a person using a floor buffer on a shiny floor in a shelter setting. The person is standing on the buffer, and the floor reflects the light. In the background, there are some metal cages or racks.

From slippery floors to rambunctious dogs and hazardous chemicals, animal shelters contain many potential dangers to the public. You can mitigate these with smart safety practices and tips from the Association of Shelter Veterinarians.

## The ASV Guidelines In Real Life

### PART 6: Safe and Sound

#### Creating a healthy shelter environment for animals and people

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In 2010, the Association of Shelter Veterinarians (ASV) released a document several years in the making: *Guidelines for Standards of Care in Animal Shelters*. Developed by a roster of veterinary experts, the guidelines are designed to “balance animal welfare science with practical and realistic recommendations for shelters,” and to provide a vision based on the needs of animals—which, the authors noted, remain the same regardless of how individual organizations’ missions and resources may differ. Here, we feature the sixth in a series of stories using real-life shelter examples to demonstrate how the ASV guidelines can be applied within the sheltering and rescue field to create better and more humane outcomes for the creatures we care for. To read other stories in the series, go to [animalsheltering.org](http://animalsheltering.org).

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shelter professionals, we dedicate a great deal of time to ensuring the health and wellness of the animals in

our care. But we also have a responsibility to protect the people who enter our shelters. It takes thousands of staff and volunteers to care for the millions of animals who pass through shelter doors each year—and that's just the folks working in-house. Now consider the millions of people who come in to search for a lost pet, adopt a new one, or attend a shelter event. The ASV guidelines note that it "is essential that animal shelters take necessary precautions to protect the health and safety of animals, people, and the environment in the shelter as well as in the community. An organization's mission should never be achieved at the expense of public health and safety."

The first step to ensuring that threats to public health are minimized is to identify potential hazards associated with the shelter environment. The Occupational Safety and Health Administration (OSHA) defines a hazard as a condition or activity that, if left uncontrolled, can result in injury or illness. Hazards fall into three main categories: biological, chemical, and physical. Once identified, hazards can be lessened by changing the way some procedures are performed, providing appropriate training, and using personal protective equipment (PPE).



## Biological Hazards

Infections that can spread between animals and people are called zoonotic diseases. Ringworm, salmonella, and rabies are just a few that may be of concern to shelters. Though tiresome to hear, it is still true that the single most effective zoonotic disease prevention tool is good hand hygiene. As noted in the ASV guidelines, "Ideally, hand-washing stations or sinks should be easily accessible to all visitors, staff, and volunteers because hand-washing is the best way to protect people and animals in the shelter from possible disease transmission."

The Franklin County Dog Shelter (FCDS) in Columbus, Ohio, recognized the importance of this when designing its new shelter, which opened in October 2011. Hand-washing stations and alcohol dispensers are located strategically throughout the building, near all animal housing areas, and at the point where most visitors exit the building. The shelter understood that many people won't go out of their way to locate a restroom to wash their hands, so convenience and visibility might increase compliance.

In picking up and taking in stray and unwanted animals, many shelters play an important role in community rabies control and prevention. Many shelters are also involved in the quarantine of animals who have bitten someone. "To identify possible rabies exposures, all persons presenting an animal must be asked if the animal has bitten anyone within the last 10 days or had any recent contact with wildlife," the ASV guidelines recommend.



Staff at Charlotte Mecklenburg Animal Care and Control (CMACC) in North Carolina do this routinely. The shelter also ensures that—per the guidelines—the public does not have unsupervised access to areas where animals are isolated for zoonotic conditions, staff access to those areas is limited, and enclosures of animals with suspected zoonotic disease are clearly marked to indicate the condition and any necessary precautions that should be taken.

A stray kitten was recently surrendered to CMACC, and when asked, the person who found the kitten reported that she had indeed been bitten. The animal was a young kitten in apparent good health; however, she was managed in the shelter as if she were contagious for rabies. In accordance with CMACC protocols, the kitten was placed in rabies quarantine with no public access, and all staff caring for her took appropriate measures—including safe handling practices to prevent bites and scratches, and the use of PPE to prevent direct contact with saliva—to prevent the transmission of rabies. They also restricted animal care to only those staff who had been previously vaccinated against rabies.

On her daily medical rounds, Dr. Mary Blinn resisted the urge to play with the cute kitten and monitored her closely—and after a few days of quarantine, she detected some subtle behavior changes that correlated with early signs of rabies. The kitten was euthanized, tested, and confirmed to be rabid—in time for the person who'd been bitten to receive lifesaving treatment to prevent infection. CMACC's actions effectively prevented additional human exposures, so no others required post-exposure rabies treatment.

**Putting hand sanitizer stations near exits and animal housing areas—where people won't have to go out of their way to use them—is a smart practice. Use friendly signage to explain their purpose and encourage their use.**

Without the types of precautions taken in this case, rabid shelter animals have the potential to expose countless people to this fatal disease.



### Chemical Hazards

OSHA's Hazard Communication Standards have recently been updated to require that information on chemical hazards be both available and understandable to workers. (More information on the new federal rules can be found at [osha.gov/dsg/hazcom/index.html](http://osha.gov/dsg/hazcom/index.html).)

Some harmful chemicals that may be encountered in shelters include pesticides, waste anesthetic gases, and cleaning agents. Most shelters maintain a book of Material Safety Data Sheets for each hazardous chemical stored or used in their facility. These sheets are provided by the manufacturer and detail information on the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures. Shelters should ensure that staff are familiar with the products they are using and understand the safety measures needed to protect themselves and others from routine use as well as spills and accidental exposures.

Ensuring the availability of cheap foam earplugs can provide your kennel staff and volunteers with a degree of hearing protection.



The FCDS addressed several chemical hazards when it built its new shelter. Eyewash stations are accessible to those needing to flush chemical splashes from their eyes. To reduce staff exposure to waste anesthetic gases from the nearly 4,500 surgeries performed there each year, the shelter installed an active scavenging system (a device that traps waste gases and expels them into the outside atmosphere).

By far the most commonly encountered chemicals in shelters are those used to clean and sanitize. Used appropriately, these chemicals can save animals' lives. Used inappropriately, they can cause harm to both animals and people. Skin burns, eye ulcers, and respiratory irritation are some of the most frequently reported health problems.

To ensure safety and efficacy, it is essential that cleaning agents be used and diluted per label directions, including

### Resources

Many resources are available in print and online formats to help shelters identify and mitigate potential public health hazards. OSHA has an online tool to guide organizations through the process of developing and implementing a comprehensive health and safety plan—it's available at [osha.gov/SLTC/etools/safetyhealth/index.html](http://osha.gov/SLTC/etools/safetyhealth/index.html) and the OSHA hazard guide is at [osha.gov/Publications/osha3071.html](http://osha.gov/Publications/osha3071.html).

There's also an OSHA safety guide specifically for animal shelters; find it at [americanhumane.org/animals/professional-resources/for-shelter-professionals/publications/american-humane-osha-guide.html](http://americanhumane.org/animals/professional-resources/for-shelter-professionals/publications/american-humane-osha-guide.html).

the use of personal protection—such as goggles and other protective garments—against splashes and/or inhalation. The necessary precautions will vary depending on which product is being used and its concentration. Emergency spill kits and eye wash stations should also be strategically located near areas where chemicals are stored or handled.



### Physical Hazards

Physical injuries can occur anywhere, and their causes can be as wide-ranging as an unmarked slippery floor to poorly maintained equipment. Some kinds of physical injuries, though—such as animal bites and hearing damage—are a greater risk in animal care facilities.

Making sure your staff is trained in animal handling, keeping that training current, and providing the equipment they'll need to do their jobs safely are among the best ways to avoid bites, scratches, and even back and neck injuries.

For example, staff should understand why it may not be safe to reach for a dog who has rolled over onto his back, and why it's so important to pay attention to a cat's tail movements. One of the most crucial, yet frequently overlooked, tools for humane animal handling is time. Animals who appear nervous or fractious can often be humanely handled with just a leash or a towel if they are approached slowly and given sufficient time to acclimate to the handler's presence.

To help prevent bites and scratches to shelter visitors, the shelter should keep the public away from animals designated as "staff only" animals. Beyond that, shelters can counsel people on how to safely handle cats and kittens, prevent prospective adopters from engaging in rough play with dogs and their toys, and advise them to watch for body language indicating an animal has stopped being comfortable in a situation.

Physical injury can occur in other ways, too. According to the ASV guidelines, "Exposure to excessive noise (e.g., barking, slamming cage doors, compressors or other equipment) may lead to irreversible hearing loss; this risk





is often under-recognized.” Sound pressure levels in some shelters regularly exceed 100 dB, creating a health and welfare problem for people and animals. Because of this risk, the ASV guidelines state that “noise abatement materials should be utilized in animal holding areas, and hearing protection must be provided for employees working in loud environments.”

In 2011, the League for Animal Welfare (LFAW) in Batavia, Ohio, partnered with researchers from the University of Cincinnati’s Fetch Lab ([fetchlab.org](http://fetchlab.org)), led by Dr. Peter Scheifele, to help control excess noise in their shelter. Acoustic analysis over a six-month time period recorded sound level equivalents ranging from 100 to 108 dB. These levels exceed the threshold requirement for human hearing protection, and this study was the first to demonstrate a measurable detrimental impact on the hearing of dogs exposed to excessive noise; this work is detailed in “Effect of kennel noise on hearing in dogs,” in the April 2012 edition of the *American Journal of Veterinary Research*.

Like many shelters, LFAW’s dog kennels are built mainly of concrete block and chain-link fencing. Using grant funds for this project, shelter manager Mary Sue Bahr purchased sound panels that could be disinfected and had them installed in one of their four dog kennels. “It was incredible,” says Bahr. “...There was such a difference, it was immediately apparent as soon as they were put up.” Volunteers commented that you couldn’t “feel” the sound anymore. Dr. Scheifele’s next sound measurements demonstrated that noise reduction was better than 20 dB, and more importantly, the reverberation was decreased by 80 percent! This reduction in sound levels also helped calm many of the dogs, making them less likely to bark. That not only further reduces noise, it may help the dogs show better to adopters. Bahr says she is actively raising funds to install sound panels in the rest of the dog kennels.

Noise-reducing panels, tiles, barriers, etc., are all recommended. Shelters that can’t afford such additions can

make a dent by hanging materials such as blankets, quilts, or towels on walls to help absorb noise. Those materials may even serve as fun decorations with sports team logos or other creative themes, and they can be taken down and washed when necessary. You also might consider installing cheap but nonporous and disinfected barriers (look for donations from a local hardware store) between runs to help keep dogs from barking at one another. (One caveat: Watch for animals whose stress might be increased by a feeling of isolation.) Managing animal behavior is another inexpensive way to reduce noise in the shelter: Walk dogs well away from the building, keep them mentally stimulated with Kongs and other enrichment toys so they’ll be quieter and less stressed, and use techniques like clicker training to teach them that they will be rewarded for quieting down when people enter the kennel.

At animal shelters, our focus is primarily on caring for and saving the lives of the animals who come to stay with us. Dealing with potential hazards onsite may not seem like



**The League for Animal Welfare in Batavia, Ohio, worked with researchers from the University of Cincinnati to test sound levels in its kennels. Results showed noise was at levels that needed ear protection, and the shelter installed sound panels in one of its kennels to mitigate the problem, resulting in noise reduction of better than 20 decibels.**

a top priority, but many of the possible dangers can affect quality of life for both animals and people. As the case at CMACC so clearly demonstrates, taking the time to address these issues appropriately may make your shelter a lifesaver on a whole new level. **AS**

*Download your copy of the ASV guidelines at [sheltervet.org](http://sheltervet.org). They’re an invaluable resource for keeping your shelter healthy.*